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ABSTRACT

The Department of Nursing of St. Anselm's College undertook a project designed to improve the curriculum and instructional design of the nursing program. The general objective was to develop and revise learning packages by providing supportive and technical assistance to the faculty. The following tasks were accomplished: development of learning packages for courses; providing resources for faculty role change from content providers to facilitators of learning; planning and implementation of learning environments and materials; improvement of management systems in the instructional media center; sharing project process and products with staff members of other regional schools of nursing; and providing for external evaluation which would collect, organize, analyze, and report data relative to achieving the other tasks. Factors that influenced project outcomes included planning by the faculty, technical assistance, change strategies, performance budgeting, staff development, comprehensive evaluation, project management and coordination. A plan for continuing activities related to the project is included. Appendices include an introductory learning package for faculty, titles of learning packages, titles of programs produced locally, titles of computer programs adapted to the college, and a survey of student attitudes regarding the revision of the learning packages. (SW)

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# DEVELOPMENT FOR INDEPENDENT AND GROUP LEARNING IN A CORE CURRICULUM

FINAL PROJECT REPORT

June, 1977

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HE 010 467

# DEVELOPMENT FOR INDEPENDENT AND GROUP LEARNING IN A CORE CURRICULUM

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Final Project Report
June, 1977

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DEVELOPMENT FOR INDEPENDENT AND GROUP LEARNING

IN A CORE CURRICULUM

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## ACKNOWLEDGEMENTS

"Human thought, not physical matter, is the raw material of technology." - S.P. Marland, U.S. Comm. of Education

To the people of St. Anselm's College Department of Nursing, Adminiministrators, Faculty, Students, and Staff, who made the project, "Developing Resources" such a challenging and productive process, thank you.

The Project Team

Professor Rose Freeman, Director
Professor Lucille Lavoie, Assistant Director
Dr. Howard Russell, Instructional Developer
Mrs. Carol West, IMC Manager
Mr. Steven Messino, AV Specialist
Mrs. Yvonne Fellows, Secretary

## DEFINITIONS

CORE CURRICULUM - Refers to a pattern of the experience curriculum into a closely integrated and interrelated whole, in which one division, the core curriculum, is devoted to the development of the common competencies needed by all, and the other division emphasizes the development of special competencies based upon the recognition of individual differences in interests, aptitudes and capabilities, the entire curriculum utilizing consistently the same principles of learning, teaching methods, and problem organization.[1]

LEARNING PACKAGE - A self-contained set of learning activities in any form, predesigned to provide some degree of individualization and self-direction to help a student achieve pre-determined learning goals.

EDUCATIONAL TECHNOLOGY - Is a process whereby learning resources are planned, produced, utilized, and evaluated. It is the specification of objectives, the careful analysis of student and subject matter, the subsequent production and delivery of instruction which, when taken together, indicate the application of technology.[2]

SYSTEM - An integrated assembly of components, persons, processes, and things, working independently and in interaction with a specific input to achieve a previously specified output.

DEVELOPMENT OF RESOURCES
FOR INDEPENDENT AND SMALL GROUP LEARNING
IN A CORE CURRICULUM

A. Situation with Which the Project Dealt

The Department of Nursing of St. Anselm's College has been in the process of developing and implementing an innovative curriculum consistent with current trends in education. Beginning in 1966 with a project entitled "Development of a Core Curriculum Based on Identification of Common Principles and Concepts Underlying Professional Nursing (NPG-158-03), funded under the Nurse Training Act of 1964, the objective was to develop a curriculum which abolished the old divisions of nursing courses according to clinical disciplines. This eliminated needless duplications of learning and enabled students to function capably in diverse nursing situations by applying concepts and principles common to all of nursing.

At the close of that original project the need was seen for additional instructional media resources and an environment more conducive to independent and small group learning in order to 1) provide the opportunity for students to more actively participate and be self-directing in the learning process, and 2) assist instructors in changing their role from content providers to facilitators of learning. This led to a second project, 01-D-000045, funded for the period of June, 1972 to May 31, 1975.

During this time, curriculum development continued utilizing the techniques of team teaching, seminar, and independent study. Environments were rehabilitated to provide additional seminar rooms and a flexible media complex with simulation laboratories.

Through this experience, the need for learning packages (LPs) as a means of organizing and presenting learning activities became apparent. A few packages were developed and their use was evaluated.

B. Anticipated Outcomes Prior to Initiation of the Project

The renewal project was designed to take advantage of gains already made in the development of resources and to continue to improve nurse education. The general objectives were to:

1) develop and revise learning packages by providing relevant faculty development in order to continue the project activities after the grant termination;

2) provide, for a two-year period, full-time supportive assistance for faculty in order to meet the foregoing objectives.

We anticipated a continuing strengthening and development of curriculum by the following processes or tasks:

1) developing for each nursing course learning packages with clear objectives and guided discovery situations;

2) providing resources for faculty role change from content providers to facilitators of learning;

3) planning environments and materials for learning in order to facilitate implementation of the curriculum and for students to be more active in their own learning,

4) improving management systems of the Instructional Media Center (IMC) and other audio visual concerns;

5) sharing project process and product with regional baccalaureate schools of nursing via workshops or conferences;

6) providing external evaluation of process and product in order to gain insights into strengths and weaknesses.

C. Changes in Initially Approved Plan and Reasons for Them

There have been no major changes in the original design. We did experience changes in personnel (Media Specialist and External Evaluator) during the first year of the project. However, qualified replacement personnel were appointed within a few months of resignation.

Sections D through G are reported in two parts. Part I gives a description of outcomes and other information. Part II, which follows Part I, presents a quantitative and qualitative assessment of project outcomes and factors that influenced these outcomes as evaluated by Dr. Howard Russell, Instructional Designer, and by Dr. Louis Aikman, External Evaluator.

In Appendix A may be found a copy of the report from Consultant, Dr. Gaylen Kelley, who visited the project team for evaluation of the implementation of the environmental aspects of the project.

D. Outcomes of the Project and How Determined

1. Development of Learning Packages

All nursing courses are now presented in the LP format. The LP contains all stimuli for independent study, preparation for class, seminar and clinical experience for a particular concept or model for a concept. The LPs have all undergone field use, have been critiqued and evaluated by students and faculty, and indicated modifications or revisions developed. See Appendix B for a list of titles of LPs for 1976-77. Summer courses for Registered Nurses are currently generally derived from selected LPs from Nursing III and Nursing IV.

With the entire curriculum in the LP format, strengths, weaknesses, and repetitions are very visible. Continual curriculum development with instructional efficiency, humanism, and accountability for instructor and student is facilitated.

2. Faculty Development in Changing Role to Facilitators of Learning

With the guidance of Dr. Russell, Instructional Designer, all faculty members have been involved in the process of development, utilization, evaluation and revision of LPs. The process requires team work, is continual, and new faculty members become oriented and involved as they work with the teaching teams. An LP has been developed to facilitate the orientation of new faculty members to our LP system (Appendix C).

3. Students More Active in Their Own Learning

Students are more responsible for their own learning, and increased independent learning has been built into the curriculum

within the constraints of "Rules and Regulations Pertaining to Nursing Education, Nurse Licensure, and the Practice of Nursing" of the Board of Nurse Education and Nurse Registration of New Hampshire.

With the use of LPs, students are readily aware and accountable for what is expected of them and know how they will be evaluated. Within identified time limits, the students can work at their own pace, learn how to manage their time, and are assured the highest possible opportunity for achieving objectives.

In addition, students have graciously assisted with the critiquing and evaluation of LPs. We note that the results of National Test Pool examinations remain above 500, and the trend for progressively better results is evident in the past two years. Although the mean remained over 500, there was a decrease in the mean during the transition years from traditional curriculum to core curriculum three to five years ago.

4. Improved IMC Management and AV concerns

With the assistance of Mrs. Carol West, IMC Manager during the project; Mr. Bernard Colo, Director of the AV Department of the college; and Mr. Steven Messino, Audiovisual Specialist during the second year of the project, the operations and capabilities of IMC have been facilitated and offerings increased.

The cataloguing and reorganization of instructional materials has been completed. The system has been demonstrated to visitors who requested assistance with this aspect of IMC management.

The CCTV switchboard has been simplified and instructions for operation revised accordingly.

For the smooth continuation of activities after the end of the project, "Guidelines for Faculty/AV Department Responsibility in the Use of IMC and in AV Production" were developed and approved by the faculty, AV Department personnel, and administration.

Resources for simulation labs have been increased considerably, mainly funded by the college. Instructional materials purchases have concentrated essentially on those required for small group teaching-learning of health assessment.

Media resources have been expanded by many commercially-made programs, especially on growth and development and mental health, which we have adapted to our needs and also by locally produced programs, if not available commercially. A listing of titles of local productions by faculty and Mr. Messino, AV Specialist, may be found in Appendix D.

5. Sharing Project Process and Product

a. The Project Team presented three all-day workshops and conferences which were well attended by faculty representatives from at least fifteen New England collegiate schools of nursing. The programs were approved for continuing education units by the New Hampshire Nurses' Association. The focus of the workshops was on the following general areas of teaching-learning activity: Core Curriculum, Evaluation, Development of Learning Packages, and Designing Equipping, and Managing a Media Center to meet the goals of a nursing curriculum. Titles of topics were:

1) Systems Approach Applied to Nursing Education
2) Redefining Learning Goals for a Curriculum in Professional Education

3) Designing, Equipping and Managing a Media Center to Meet the Goals of a Nursing Curriculum (repeated on three dates by request)

4) Developing LPs for Independent and Small Group Learning to Meet the Goals of a Nursing Curriculum

5) Evaluating the Effectiveness of a Nursing Curriculum to Obtain Feedback for Improvement

6) Planning the Application of Workshop Learnings to Own Curriculum

7) Learning Package Development

8) What Happens to the Student When Teaching-learning Roles Change

9) Selecting Media and Teaching Methods

10) Evaluating Teaching Effectiveness for Faculty Development

11) Student Evaluation of Learning Materials

12) Individual Goal-setting as a Means of Assessing the Clinical Performance of Nursing Students

13) Constructing Tests and Interpreting the Results for Student Diagnosis

14) Evaluation and the Improvement of Nursing Education

b. The project provided opportunity for a nurse doctoral student from Boston University 1) for field practice in educational technology and curriculum development and 2) to observe the role of the instructional developer in a nursing program. The student participated in a variety of meetings: Curriculum Coordinating Council (CCC) the executive committee of the nursing department; project team meetings; teaching team meetings considering evaluation and LP development; Faculty Development Committee meetings and Evaluation Committee meetings.

6. Surveys of Faculty Attitudes and Opinions and Student Reactions to the Curriculum

During the two years of the project, an objective third party was available to obtain and report on information. Formative evaluation of LPs was performed by students and faculty. Formative evaluation is an ongoing process of monitoring the progress of a teaching-learning situation for the purpose of capitalizing on strengths and correcting weaknesses.

A specific checklist was developed for each LP on all learning levels. The checks and comments were tabulated and reviewed. Appendix E demonstrates excerpts from "Survey of Student Attitudes Regarding the Revision of the Content of Learning Packages" prepared for the Sophomore Year Team by Dr. Russell. All items with a suggested "need for revision" rate indicated by more than 15% of the students responding were given special consideration and either eliminated, revised or clarified. Student attitudes and opinions were derived from open-ended responses on the LP evaluation forms and by an interview with Dr. Russell.

At the end of the first year of the project, Dr. Aikman interviewed faculty members regarding the total program. A summary of assessment of faculty ideas, insights and attitudes regarding the development of learning packages and their function in the core curriculum is presented in Part II of this report.

E. Factors That Influenced These Outcomes

Favorable influencing factors in this project are similar to those which influenced previous projects in the Department of Nursing at St. Anselm's College. There has been encouragement and

financial support from both college and HEW personnel in the continuing development of nursing curriculum according to current trends in education.

1. Administration and Nursing Faculty at St. Anselm's College

College personnel have worked toward attaining the objectives of the project and planning for its continuation after completion. Administration provided funding of project personnel beyond those supported by the grants, including the Assistant Director of the project and part-time assistance in production, budgeting and purchasing from the AV Department of the College. Faculty and staff in the Department of Nursing demonstrated a willingness to tread new grounds in education and have worked many extra hours to complete syllabi or audiovisual productions.

2. Assistance of Instructional Designer and Other Project Team Personnel

The expertise of Dr. Howard Russell in guiding the teaching teams in the development of learning packages prevented considerable duplication of effort, focused on implementation of clearly written objectives, and demonstrated the use of formative and summative evaluation.

Dr. Louis Aikman, external evaluator for the project, has provided objective assessment of project activities. His report may be found in Part II of this report.

The Project Director and Assistant Director were provided more time to work with the teaching teams by a Media Center Manager, Mrs. Carol West, who helped faculty to become familiar with the use of expanding facilities of the media center for simulation labs and who also worked on the management system and cataloguing procedures

for continuing facilitation of use. The Audiovisual Specialist, Mr. Steven Messino, was available for assistance to faculty for development of media aids, use of CCTV system, and introduction to the possibilities of Computer-Assisted Instruction (CAI).

3. Student Cooperation

Students in all nursing classes have completed numerous evaluation sheets. The critiquing was indispensable in supplying feedback for insight into areas of strengths and weaknesses of learning package activities and methods of approach to seminars and large group teaching. Additional assistance and feedback was received from student representatives who attended teaching team meetings and participated in committee meetings with voice and vote.

4. Adequate Space and Resources in Media Center

The media center is a necessity as an integral factor in meeting the implementation of the objectives of the curriculum. We have been able to constantly increase and update holdings, with outdated software deleted on a planned schedule.

5. Funding

Financial support is a necessary base for all efforts. We are grateful for the considerable funding from HEW, in order to be able to supply the basic needs for the innovations. Maintenance, along with some initial cost support, has been provided by the college. The funding by the college has been planned on a level which can be maintained after the completion of the project. Consideration has been given to the continuation factor throughout the implementation of the project.

F. Description of Effects of the Project on the Nursing Education Program

The faculty of the Department of Nursing has developed learning packages as a means of integrating student learning activities (independent study, lecture, seminar, simulation lab and clinical experience) for the most effective achievement of curriculum goals. The process of development, evaluation and revision of LPs is on-going, and a Curriculum Review Committee has been established to continually monitor the effectiveness of the curriculum.

A need for additional formative evaluation and clearer objectives for affective and psychomotor objectives in clinical performance has been identified as a priority for continuing activity. Another outcome has been the consideration of an external degree program, the implementation of which will be facilitated by the LP technique.

A theory elective at the end of the senior year has been made possible, because of the LP format. In this part of the curriculum, the student and faculty member together identify the objectives, and the faculty member builds the course within the nursing major.

The faculty has found increased flexibility in placement of concepts within the integrated curriculum by moving LPs. Repetition is decreased and adjustments can be made by changing pieces within the context of the conceptual framework.

Faculty and student attitudes are consistent with the changes in approach with increased accountability for teaching-learning built into the learning package system. A widened range of options are offered to faculty and students in selecting the most

effective method for teaching-learning, independent study, seminar, simulation lab, clinical lab, or lecture. The changing role of the instructor from a provider of information to a facilitator of learning has been activated. As a result, students are more responsible for their own learning.

Project support permitted time to evaluate a considerable amount of commercial software and to select that which was adaptable to the curriculum. In addition, tailor-made VTR clips and slide sets were developed, when not available commercially. Evaluation of the effectiveness of the materials was incorporated in the LP evaluations in which the materials were assigned or optioned.

Information on the process and product of the project was shared via workshops and conferences with other collegiate schools of nursing in New England, many of which were undergoing or planning similar changes in teaching-learning. There was considerable interest in student attitudes, orientation to independent study, the evaluation process and other aspects important to the development of learning packages and independent study.

G. Brief Summary of What This Project has Meant to the Nursing Program Involved

The development of our resources and the changed approach to teaching-learning and the use of learning packages has meant:

1) Facilitation of the transition of faculty from provider of information to facilitators of learning;
2) Increased accountability for teaching by faculty and for learning by students;
3) Increased responsibility of students for their own learning;

4) Improved communication among faculty and between faculty and students;

5) A more visible method of on-going assessment of the effectiveness of the curriculum by the Curriculum Review Committee;

6) A faculty prepared to continue the development, evaluation and revision of learning packages;

7) An on-going effort to develop clearer objectives to facilitate the evaluation of clinical application of principles;

8) Increased and improved environments and materials for teaching-learning;

9) Planning for an External Degree Program with the use of LPs;

10) The application of educational technology to facilitate learning in the curriculum.

## PART II

## II. OBJECTIVE AND SUBJECTIVE ASSESSMENT OF PROJECT OUTCOMES AND FACTORS THAT INFLUENCED THESE OUTCOMES

The basic intent of the project was to improve the curriculum and the instructional design in the preparation of persons for the practice of nursing. The general objective stated in Part I, Section B, was to develop and revise learning packages by providing supportive and technical assistance to the faculty, thus assuring continued instructional revision and improvement after grant termination. This outcome was to be achieved by accomplishing the following tasks:

- Develop learning packages for each of the courses in the nursing program; namely, The Nurse Becoming (TNB) at the Sophomore Level; Nursing I and II, Junior Level; and Nursing III and IV, Senior level.
- Provide resources for faculty role change from content providers to facilitators of learning.
- Plan and implement learning environments and materials.
- Improve management systems in the Instructional Media Center (IMC).
- Share project process and products with staff members of other regional schools of nursing.

Another task was to provide external evaluation which would collect, organize, analyze and report data relative to achieving the above tasks.

This part of the report presents evidence for documenting the achievement of the above tasks. The data was obtained through various assessment procedures applied during the project's implementation. The results of the data analysis are summarized in relation to each of the tasks. The overall success of the project can be made in part on how well these tasks were achieved.

Following the above documentation of task achievements, e.g. project outcomes, a brief section will describe factors that were influential in achieving these outcomes.

## Evidence Documenting Achievement of Project Tasks

The evaluative data presented below were obtained through various procedures. Faculty ideas, insights and attitudes were obtained through a formal structured interview conducted by an external evaluator. Student opinions, attitudes relative to various aspects of the curriculum, such as the instructional design and the instructional process, were continuously appraised by means of formal student survey questionnaires. Formal and informal observations by external consultants relative to various program components such as instruction, staff training, materials development and project management, provided additional outcome appraisals. Workshops and conferences conducted by the project staff for the purpose of sharing ideas, procedures and products with other regional schools of nursing were evaluated by means of formal instruments.

Task 1: Develop Learning Packages for All Nursing Program Levels

This major task was accomplished. In brief, the procedure was as follows: First, faculty teams for each of the nursing program courses at all levels -- Nurse Becoming (Sophomore), Nursing I and II (Junior) and Nursing III and IV (Senior) were created. Each team, with a team leader and with the technical assistance of a full-time instructional program designer, developed and sequenced learning goals. Through goal analysis, intermediate performance objectives were written. Performance Objectives, instructional materials, activities, and teaching strategies were identified and evaluated for inclusion in a flexible learning package format.

Instructions for use of a Learning Package, the format and the contents were revised on the basis of faculty appraisals, evaluation of student achievement and the students' assessment of package content. Frequency and patterns of student use of materials were also documented.

Student achievements were to be evaluated by the current testing procedures of the department. A system of entry level and post-test measure were to be developed congruent to learning package objectives.

## Evidence of the Project's Success in Developing Learning Packages

Through on-site visits, review of project documents, staff meetings, and interviews with the faculty, the external evaluator verified that the process for developing learning packages involved several steps. Table 1 presents these steps in St. Anselm's Core Curriculum development which were clearly discernable to external observation. The goal of constructing and trying out Learning Packages for all courses at the various levels was achieved.

In addition to developing and trying out the LPs, faculty and student attitudes, opinions and ideas regarding learning package were obtained.

In depth interviewing of a representative sample of the faculty indicated a very positive attitude toward developing learning packages.[1] Sixty percent of those interviewed volunteered positive attitudinal statements. Although issues and problems were mentioned relative to planning and trying out LPs, the faculty deemed that such problems were solvable. Table 2 presents a summary of the nature of the attitudinal statements and illustrative issues relative to planning and using LPs.

---

[1] St. Anselm, Department of Nursing. Assessment of Faculty Ideas, Insights and Attitudes Regarding the Development of Learning Packages and their Function in the Core Curriculum. August, 1976, Xerox, 34 pp.

TABLE 1 Steps in St. Anselm's Core Curriculum Development and Learning Package Construction

1. Analysis and identification of needs.
2. Definition of major curricular goals and objectives.
3. Identification of alternative ways to meet goals and objectives.
4. Design of curricular components; e.g. TNE and Levels I, II, III, IV; Scope and Sequence charts, etc.
5. Analysis of (a) resources required, (b) resources available (c) constraints.
6. Action to remove or modify constraints; e.g. staff development.
7. Design, Develop, Sequence and Validate Learning Packages.
   - Exact specification of learning outcomes.
   - Analysis of learner characteristics and specification of entry behavior.
   - Selection and/or development of instructional materials and/or instructional processes; e.g. lectures, seminars, clinical experiences, IMC.
   - Sequencing of LPs.
   - Design of Student Assessment Procedures
8. Teach the curricula (Learning Packages), try out, evaluate.
9. Adjust, revise, evaluate further.
10. Major evaluation and become operational (e.g. live with new curricula and instructional design for a while).

TABLE 2 Attitudinal and Issue Statements about Learning Packages and Their Development and Use Obtained from 15 Faculty Members Interviewed

(Each Statement Made by a Different Person)

| (1) Attitudes Toward LPs as a Curriculum Process | (2) Issues Relative to Planning LPs | (3) Issues Relative to Using LPs |
|---|---|---|
| a. This is the first year I feel proficient. | a. Time pressure | a. Continuous editing and revising syllabi and LPs in order to identify and include only essential materials and/or instructional process to achieve learning objectives. |
| b. In the beginning I didn't understand what we were doing - I now do. | b. Team Coordination and concensus of ideas. | |
| c. Developed an LP on ( ) and found it a stimulating experience and rewarding as a team member. | c. Assessment of prior student achievement. | |
| d. By now no problems with LP concept. | d. Orientation of new faculty. | |
| e. Very pleased with LPs - they delineate objectives and clarify curriculum. | e. Behaviorially stating the nature of student learning. | |
| f. First LPs were done too hastily - now I feel fairly comfortable with LP idea. | | |
| g. There is some stress in developing LPs but they help us to know what others are doing. | | |
| h. I love LPs - the syllabi are very clear. | | |
| i. I welcome LPs - the new ones are marvelous. | | |

Students completed a questionnaire on how they used the different sections of each learning package. This instrument, called a Student Questionnaire -- Learning Package Use Survey was administered following the completion of a particular LP. Students' responses to learning packages were collated in summary reports. The faculty developmental team and the instructional designer utilized the information for revision of the package content.

Although data collected and analyzed from student assessment of IPs are too extensive to summarize in this report, the nature of student responses obtained reflected different purposes as follows:

| Purpose and Instrument | Illustrative Items |
|---|---|
| (1) We want to find out how you use the different sections of the learning package, so that we can give future students more helpful guidance in their use.<br><br>Instrument: Learning Package Use Survey (10 items) | a. Use of objectives stated in beginning of LP (check one)<br>__ don't read them<br>__ read them but that is all<br>__ each help me pick and choose what to study<br>__ use them as a way to be sure I have accomplished everything I'm supposed to do.<br><br>b. How much time did you spend on the readings and IMC material.<br>__ less than 1 hour<br>__ 1-2 hours<br>__ 2-3 hours<br>__ 3-4 hours<br>__ more, e.g. _____ |

(2) Your evaluation will be used to improve and/or revise this learning package: (e.g. TNB LP-204 Dynamics of Group Process)

Instrument: Learning Package Content Evaluation

LP Component to be Evaluated:

a. Pre-test
b. Reading #1
   Learning Tasks for #1
c. Film-More than Words
   Learning Tasks for Film
d. IMC Trays #252-3
   Learning Tasks for trays

Evaluative Alternatives

___ appropriate
___ too simple
___ too difficult
___ unnecessarily repetitive
___ not clearly related to objective

Students could fill out the forms quickly by checking the appropriate response which reflected their behavior, opinion or attitude. In order to report the findings, ratings for each item were tallied and percentages of students responding to a particular alternative choice calculated.

For example, the summary report of the survey of students' attitudes on the 10 TNB Learning Packages[1] indicated that the most obvious thing to note from the findings as a whole was the positive student attitude toward most of the learning tasks and activities in the TNB learning packages. Items for which more than 15% of the students suggested that the faculty consider for revision were discussed in the report.

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[1] St. Anselm's College Department of Nursing. A Survey of Student Attitudes Regarding the Revision of the Content of the TNB Learning Packages, September, 1976, Xerox, 24 pp.

In summary, not only was the task of developing learning packages for each of the courses at the various levels accomplished, but also each was employed as an instructional process, evaluated by students and faculty, and many have or are undergoing revision. This cyclical characteristic of St. Anselm's curricula revision, while costing time and effort, has been one of its strengths.

Task 2: Provide Resources for Faculty Role Change from Content Providers to Facilitators of Learning

Evidence regarding the achievement of this task is qualitative and descriptive. The major human resources were excellent project management, qualified support personnel, a thoughtful faculty development committee, teaching and learning package development teams for courses at the various levels of the program, and outside consultants.

A brief analysis of project direction and management relative to several functions perhaps best describe the exemplary nature of resource provision and management.

(1) Planning. . . . . Well defined goals, objectives and desired outcomes established.

(2) Organizing. . . . Maintained balance between performance and expectation; e.g. outcomes met stated goals.

(3) Staffing . . . . Instructional Designer, Instructional Media Manager, Audio-visual specialist, Evaluator, Consultants.

(4) Staff Development . . Needs Assessment, large group Workshops, small group and individual assistance and guidance, team cooperation.

(5) Evaluation . . . . . Continuous Faculty, Student, External Evaluation - feedback and program revision.

(6) Reporting . . . . . Faculty meetings. Oral and Written reports both formal and informal

(7) Communication . . . . Many staff and faculty meetings, sharing ideas, evaluation data, etc. to encourage faculty to think and act in relationship to common purpose and understand and appreciate efforts and progress being made in all functions.

(8) Dissemination . . . . Regional Workshops, Conferences, Written Reports, etc.

Learning packages and all that such instructional systems involve ultimately will provide the major means for role change from content provider to facilitator of learning.

Task 3: Plan and Implement Learning Environments and Materials

The achievement of this task is evidenced in the number of LPs created by the various faculty teams and by individual faculty members. The instructional materials center (IMC) and its large variety of media content, all articulated with learning objectives, also reflects success in achieving this task.

Results of the analysis of interview data obtained during the faculty survey described earlier were as follows:

- Eleven of the 15 faculty members interviewed, or approximately 75%, expressed very positive attitudes regarding the

planning and implementing of the core curriculum program; for example, they felt that the ideas generated by team efforts were outstanding; that it requires much work but has many benefits; that team planning can be done and makes a lot of sense.

- Eight of those interviewed raised issues; their major thrust was that it is often difficult for people with different philosophies, interests and skills to work harmoniously; at times the experience resulted in feeling of stress; there often was a lack of coordination of efforts and a failure to move ahead. Yet, such issues were being surmounted through continual dialogue among faculty members.

Task 4: Improvement of Management Systems in the Instructional Media Center (IMC)

Analysis of the responses made by a limited number of the faculty permitted tentative conclusions regarding the use of the IMC by students and faculty. Due to time constraints, only 7 of the 15 interviewed were able to present their views. The results indicated the following conclusions:

- The general consensus was that the IMC was an extremely valuable instructional process.
- The need for an assessment of the "ideal" versus the "actual or realistic" use of the IMC as an instructional process was indicated. This suggests the importance of establishing priorities for material inclusion in the Center.

The project director identified and implemented the following method/means for improving management systems in the IMC:

- Improving accessibility through complete cataloging and reorganization of materials.
- Improving the operation of CCTU through simplifying switchboard and instructions.
- Enhancement of IMC use through developing and obtaining faculty approval of Guidelines for Faculty/AV Department Use of IMC.

Task 5: Share Project Process and Products with Staff Members of Other Regional Schools of Nursing

Workshops and Conferences planned and implemented by the project staff included a number of topics noted earlier in Part I of Section D.

Table 3 summarizes the quantitative assessment data obtained by means of an evaluation questionnaire completed by participants at the end of each of three Workshops. The resulting percentages indicate that the Workshops did an outstanding job in relation to the needs of the participants.

Subjective responses written by the participants indicated that they, as a whole, viewed the Workshop(s) to be well planned, interesting, informative, and comprehensive.

Attendance was large, all New England States were represented and over 15 institutions of nursing.

TABLE 3 Assessment of Participants Opinion Regarding the Value of the Workshop or Conference

| Criterion | Workshop or Conference | | |
|---|---|---|---|
| | (1) Developing and Implementing Instructional System N=35 | (2) Learning Packages N=44 | (3) Evaluation and the Improvement of Nursing Education N=40 |
| 1. Percent of Participants considering Workshop highly valuable vs somewhat valuable | 86% | 86% | 87% |
| 2. Percent judging speakers to be clear and comprehensible | 94% | 79% | 90% |
| 3. Percent judging <u>all</u> Workshop materials relevant to own situation | 64% | 71% | 60% |
| 4. Percent who felt Workshop fulfilled all or most of expectations | 78% | 72% | 82% |

## Factors that Influenced Project Outcomes

The process of improving a curriculum and the instructional design for preparing persons for the practice of nursing is involved, complex and encompassing. No single individual, group or agency can provide sufficient resources to cope with all the issues and problems. St. Anselm's Department of Nursing initiated new approaches to overcome limitations which its nursing faculty considered to exist in the curriculum. The goal was to develop and revise learning packages for all courses. Several factors appear to have been major ones in making the project such a successful one. Among major factors were the following:

(1) Planning by the Faculty

- Identification and documenting needs
- Establishing priorities of action
- Detailed specification of outcome(s) or accomplishments to be achieved
- Identification of strategies for achieving outcome(s)

(2) Technical Assistance - Means for Providing Adequate Resources

- Program Designer
- Media Specialists
- Curriculum and Evaluation Consultants

(3) Change Strategies - Including

- Core Courses
- Learning Packages
- IMC
- Developmental Committee
- Faculty Teams

(4) Performance Budgeting

- Allocation of fiscal resources in accordance with project objectives to be realized rather than with functions to be supported.

(5) Staff Development

- Development Committee
- Determination of nature and extent of staff development required through needs assessment procedures.
- Implementation of large and small group workshops and individual guidance.

(6) Comprehensive Evaluation

- Established goals and requirements
- Providing for rationale for decision making and LP revisions.
- Continuous assessment of projects' operational process and resultant products -- determining performance effectiveness.

(7) Project Management and Coordination

- In terms of defined goals and stated objectives and a time schedule
- Maintainence of balance between performance and expectation.
- Develop basis for communication within the department of nursing and with regional departments.

These are major factors which were observable through on-site visits, perusal of planning documents, reports of meetings, interviews with faculty and analysis of student opinions and evaluations, among other sources. Inference can be made that the success achieved in this project is to a considerable degree a result of the existence of the above factors.

H. Plan for Continuing Activities Related to the Project

A system for continuing the self-sustaining educational process evolved:

1. Administrative, faculty and student attitudes are supportive.
2. The syllabi are coordinated and prepared prior to each semester by the teaching teams, after critiquing, evaluating, reviewing, and updating of the current model.
3. The newly formed Curriculum Review Committee continually monitors the effectiveness of the parts of the system.
4. An IMC orientation and practicum to promote effective, independent functioning is planned into the semester calendars for both new faculty and new students, as they become involved in the Department of Nursing.
5. Increased media center activities, independent study and simulation labs are an integral component of curriculum plans.
6. The Faculty Development Committee implements in-service activities and workshops, according to identified needs of faculty.
7. Funds are budgeted for updating mediated instruction materials and for consultant to faculty.
8. Guidelines have been developed for "Coordinating Activity in IMC and AV Department" (177 IMC, 4/77) which include procedures for requesting assistance and commitments with continuing activity support of the AV Department in relation to maintenance, production, technical assistance, and instruction (see Appendix F).

I. Enrollment in the Nursing Program

a. At the beginning of the project period: 363
b. At the end of the project period: 365

## FOOTNOTES

1. Roland Faunce and Nelson Bossing, Developing the Core Curriculum. New Jersey: Prentice Hall, Inc., 1951, pp. 48-74

2. AECT Guidelines, 1974, Association for Educational Communications and Technology, Washington, D.C.

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Aikman, Louis. Assessment of Faculty Ideas, Insights and Attitudes Regarding the Development of Learning Packages and Their Function in The Core Curriculum. St. Anselm's College, Department of Nursing, (PT 17), August, 1976, Xerox.

Aikman, Louis. Evaluation of the Workshop on Developing and Implementing an Instructional System for Nursing Education in a Core Curriculum. St. Anselm's College, Dept. of Nursing, (PT 18), June, 1976, Xerox.

Messino, Steven. Investigation Into the Potential of CAI/CMI for a Baccalaureate Degree Program in Nursing Education at St. Anselm's College. St. Anselm's College, Dept. of Nursing, (PT 31), November, 1976, Xerox.

Russell, Howard. Survey of Student Attitudes Regarding the Revision of the Content of TNB Learning Packages. St. Anselm's College, Dept. of Nursing, (PT 19), September, 1976, Xerox. (See Appendix D)

## APPENDICES
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APPENDIX

February 7, 1977

Mrs. Rose Freeman, Professor
Department of Nursing
St. Anselm's College
Manchester, New Hampshire

Dear Rose,

It was fun to visit with you and see the progress that you have made in your program and the facilities for media support of your modular curriculum. The impact of the changes was especially dramatic since I had not visited with you for at least two years. You and your faculty are to be congratulated on developing what has to be an exemplary undergraduate educational program based on a thorough and serious committment to a systematic approach to curriculum design.

I am particularly appreciative of your allowing Dorothy Jones to spend some time with you this semester as an intern. Her background as a nurse-educator and her work in our Ed. D. program in Educational Media and Technology, should be helpful to you in your work on your new grant submission.

As you suggested, I would like to make a few observations and suggestions on your program which may be of assistance to you as you think about future directions.

1. As you continue in your curriculum development, may I suggest that you need to continue to upgrade and update the various mediated modules that support your curriculum. While I did not have an opportunity to view any of the materials, I feel that your students will increase in their sophistication and demand really professionally prepared materials. As you remember, I had been concerned about the graphic and design quality of the materials in the various modules from the beginning.

2. Should you move to expand this systematic curriculum development approach to your program for the experienced RN you may find that you must modify your materials although your present approach should remain valid. This area may well represent your next curriculum development target.

3. You may want to develop with your faculty audiotape precis of classroom lecture materials for student review. This could shorten the materials substantially and they would represent more acceptable reviews for students. Sitting through two hours of real time classroom recording is an overwhelming listening task. It is much more difficult then experiencing the class live.

4. Your facilities and use of instructional technology in your program are exemplary. You are to be congratulated! The only area that needs upgrading would be the area of television technology. New equipment and technology is constantly being developed in this area. An approach to campus-wide video development should be investigated.





DR. CARLTON R. KELLY • SANDERWOOD ROAD • WINCHESTER, MASSACHUSETTS 01890 • TEL. 334-5206

5. I feel very strongly that now is the time for you to begin following up on your graduates in order to determine if the new program has resulted in the education of nurses that are observably different once they are employed in the field. This represents a very exciting research possibility. Any work in this area should involve skills and attitudes as well as the more connonly used cognitive data accumulation.

Again, thank you for your help to Dorothy and myself. It is always a pleasure to see instructional technology well used in support of an educational program.

Sincerely,

Gaylen B. Kelley

## APPENDIX B

## TITLES OF LEARNING PACKAGES
## 1976-77

### Sophomore Year

LP 201 Introduction to Library Resources

202 Orientation to IMC

203 The Core Curriculum in Nursing

204 Theory and Practice in Evaluating the Community

205 Theory and Practice in Home Visits

206 Perspectives of Aging

207 Nursing Process and Its Documentation

208 Ethical and Legal Aspects

209 Historical Perspectives of the Emerging Professional Role

### Junior Year

LP 300 Perceptual Motor Skills

301 Interacting

302 Introduction to the Concept of Adaptation

303 Adaptation: Oxygen-Carbon Dioxide Equilibrium

304 Fluid and Electrolyte Balance

305 Developmental Crisis

306 The Newborn: Assessment of Growth and Development and Care of the Newborn

307 Immobility

308 Stress: Physiological Aspects

309 The Surgical Patient: Pre- and Post-operatively

310 Physical Adaptation: Pain

311 Physical Adaptation Through Antigen-Antibody Response

312 Psychological Aspects of Stress

313 Crisis Theory and Intervention

## Junior Year, continued

LP 314 Dependency

315 Loss

316-A Maladaptation

316-B Maladaptive Disorders and Genetic Counseling

317-A Fluid and Electrolyte Imbalances

317-B Disturbances in $O_2$-$CO_2$ Processes

317-C Cancer - Causation and Research

30 FV Family Visits to an Expanding Family

35 N-I Learning Contract for Nursery School Experience

55 N-I Medical Surgical Nutrition

58 N-I Care of the Maternity Patient and Newborn

59 N-I Pediatric Clinical Learning Contract

61 N-I & N-II Nursing the Child with Special Needs

258 Energy and Growth in the Life Cycle (Nutrition)

259 Energy Needs (Nutrition)

## Junior & Senior Year

LP 402 Health Assessment - History

402-A Introduction to Physical Examination: General Survey

402-C Physical Examination: The Head and Neck

402-D Physical Examination: The Thorax and Lungs

402-E Physical Examination: The Heart

402-F Physical Examination: The Abdomen

402-G Peripheral Vascular System

402-H Pulses and Pressures

402-I Musculo-skeletal System

402-J Neurological System

402-K Breasts and Axillae

402-L Male and Female Genitalia

## Senior Year

LP 401 Family Visits to a Problem Family

402 Physical Assessment series (see previous page)

403 Leadership Responsibilities of the Nurse in the Health Care System

404 Overview of Psychiatry and Psychiatric Nursing

405 Introduction to Critical Care

405-A Pulmonary Toilet Techniques

405-B The Role of the Nurse in Meeting the Religious Needsof the Patient

406 Assessment and Intervention Related to Cardiorespiratory Insufficiency

407 Disturbances in Hormonal Regulation: Overview

407-A A Nursing Process in Relation to Patients and Families with Diabetes Mellitus

407-B A Guide for Seminar Participation Relative to Care of Patient with Hyperthyroidism

* 408 Stress, Homeokinesis and Intervention Related to Hemorrhage Due to Various Causes

* 409 Stress and Intervention Related to the High-Risk Newborn Infant

* 410 Transition from Student to Graduate Status

450 Dynamics of Self-Destruction

450-A Alcoholism and Related Medical Problems Drug Addiction

450-B Nutritional Disorders

450-C Accidents Including Excessive Risk-taking

450-D Smoking

450-E Failure Patterns

450-F The Ultimate Act of Suicide

*Not yet in LP format.

LP 451 Child Abuse

452 Neurological Deficits and Rehabilitation-Habilitation

454 Restoration of Homeokinesis with Severe Fluid Shift

MINI COURSES: (Senior Year, Second Semester)

LP 455 Maternal-Child Health

455-A Immunizations

456 Critical Care

457 Introduction to Research

458 Humanities and Nursing

459 Human Sexuality

APPENDIX C

# A LEARNING PACKAGE ON LEARNING PACKAGES

## LEARNING GOAL

This learning package is to introduce new faculty members of the Department of Nursing of St. Anselm's College to Learning Packages. Completion of this package will give you the basic information necessary to work with a faculty team in the design, implementa- and evaluation of learning packages like the ones in the syllabi of the nursing program. This package is also a refresher for continuing faculty.

## OBJECTIVES

After completing this learning package you will be able to

1. Describe in your own words the tasks related to the following eight steps in the "Model for the Design, Implementation and Evaluation of Learning Packages":

    a. Determine learning package learning goals

    b. Determine student learning needs

    c. Determine learning package objectives

    d. Design the evaluation

    e. Design the instruction

    f. Combine elements to form learning package

    g. Students use the learning package as planned

    h. Conduct evaluation

2. Contribute to a team effort in the design, implementation, and evaluation of a lerning package.

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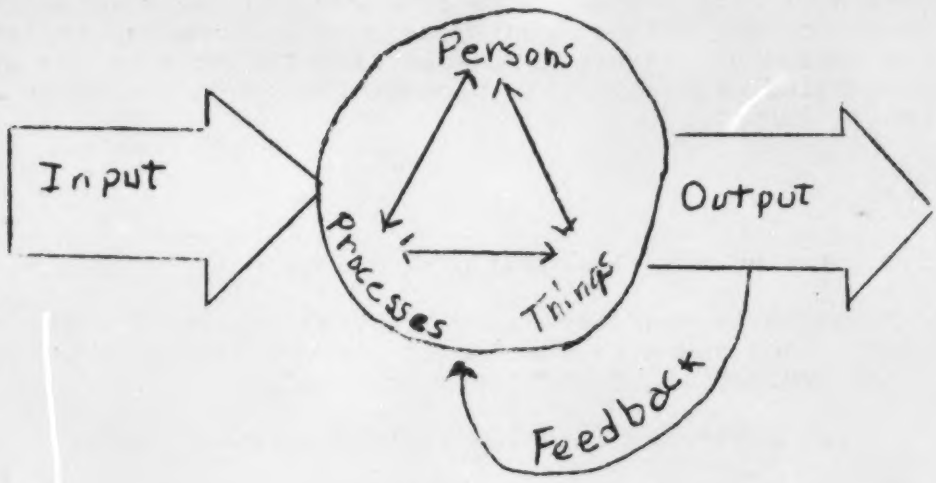
HOW YOU SHOULD PROCEED

1. The underlying concept for the eight steps in the "Model for the Design, Implementation, and Evaluation of Learning Packages" is the instructional systems approach.

   Below is one way of diagraming a system.




If you can match the parts of the system in the column on the left with the specific examples from an instructional system in the column on the right, you know enough about instructional systems to proceed with this learning package:

| | | | |
|---|---|---|---|
| 1. | Output | ___ A. | Evaluation of student achievement and attitude |
| 2. | Input | ___ B. | Instructors, administrators, support staff |
| 3. | Persons | ___ C. | Students who have <u>not</u> achieved the objectives of the instructional system |
| 4. | Processes | ___ D. | Methods of teaching, schedules, faculty roles and functions |
| 5. | Things | ___ E. | Books, equipment, instructional media |
| 6. | Feedback | ___ F. | Students who have achieved the objectives of the instructional system |

Answers: 6 A 4 D
3 B 5 E
2 C 1 F

If you have trouble matching the items on pg. 39, see Tray 5050, "The Systems Approach".

2. It is helpful to think of learning packages as mini-intructional systems. What you do when you write a learning package is to go through a system development process beginning with the output. The system development process is described below.

   A. Define the desired output in a way that everyone will be able to say whether or not it has been achieved.

      For a learning package this means that learning goals and objectives must be clearly stated so that students and faculty can agree on what they mean and can objectively determine whether they have been achieved.

   B. Determine input requirements.

      For a learning package this means that the entry level abilities of the students must be determined so that the package is neither too difficult nor too simple for the students.

   C. Assess available persons, processes, and things.

      For a learning package this means that questions such as "Who can teach?", "What media are available?", "What is in the students' textbooks?", "What is in the library?", and "Will there be a seminar, lecture or independent study?" must be considred.

   D. Assemble the persons, processes, and things to be used and design their interaction.

      For a learning package this means that after you design it, you make it part of the syllabus, schedule the rooms, order the media and materias, etc.

   E. Implement the system and evaluate the actual output against the desired output.

      For a learning package this means that after the students have used the package you test them to see whether or not they achieved the objectives and to determine their attitudes toward the package.

F. Feed back the evaluation and adjust the system to increase the congruence between the actual and desired output.

For a learning package this means that faculty members take the feedback from test results and student "Learning Package Evaluations" and use this information to improve the packages through revision.

3. The St. Anselm's definiton of a learning package:

> LEARNING PACKAGE
>
> Learning package - a self-contained set of learning activities in any form, pre-designed to provide some degree of individualization and self-direction to help a student achieve pre-determined learning goals.

A learning package amounts to a way of organizing and describing the entire instructional system necessary for the achievement of a given set of learning objectives. A learning package could include: IMC activities, textbook assignments, library readings, learning groups, laboratory, and lecture.

If you would like to consider some of the ways you might be able to increase the degree of individualization in a learning package, read "Individualization of Learning", Item A in the Appendix of this learning package.

4. The steps for the design, implementation, and evaluation of learning packages are outlined in the flow chart, "Model for the Design, Implementation, and Evaluation of Learning Packages" (Appendix, Item B). The steps of the flow chart are described in Appendix, Item C.

After you have studied the flow chart, the description of the steps, and any of the additional resources you feel you need from the list below, you should be able to look at the flow chart and describe in concrete terms the tasks involved in each step of the process.

Additional Resources listed by steps in the "Model for the Design, Implementation, and Evaluation of Learning Packages":

1.0 DETERMINE LEARNING PACKAGE GOALS, Mager (1972)
(See bibliography, Item J in the Appendix of this learning package for all references to books.)

2.0 DETERMINE STUDENT LEARNING NEEDS - no additional suggestions

3.0 DETERMINE LEARNING PACKAGE OBJECTIVES, Mager (1962) Bloom (1956); Krathwohl (1964); Kiebler, Barker, Miles (1970)

Appendix, Item D, "General Objectives and Related Specified Outcomes" will be helpful in stating behavioral objectives and supplying the action verbs.

4.0 DESIGN THE EVALUATION, Bloom, Hastings, Madeus (1971)

For the distinctions between norm-referenced tests and criterion-referenced tests look at Appendix, Items E and F.

For some ideas about writing test items read "Multiple Choice, Criterion-Referenced Test Items", Appendix, Item G.

When evaluating test questions consider "Sample Questions Which Could be Used by Faculty to Evaluate Test Questions", Appendix, Item H.

5.0 DESIGN THE INSTRUCTION

5.1 In classifying and sequencing the intermediate objectives the additional resources listed under 3.0 above will be helpful if you are interested in the levels of the taxonomies of cognitive, affective, and psychomotive objectives.

5.2 In listing and evaluating available learning resources the catalogue in the Instructional Media Center and the instructor's guides and evaluations in Room 20 will help you. The IMC Coordinator will consult with you.

5.3 The college Audio-visual Department will help you with the development of any instructional media you may need to produce yourself, but check with the IMC Coordinator first to see if your needs can be met from the IMC materials.

6.0 COMBINE ELEMENTS TO FORM LEARNING PACKAGE

The best resource for this is to use some of the other learning packages as models.

7.0 STUDENTS USE LEARNING PACKAGE AS PLANNED

8.0 CONDUCT EVALUATION

The evaluation form, Appendix, Item I, is an example of a means that is helpful in collecting information about what to revise in a learning package.

Place some description of the parts of the package you want some information about in the left-hand column, distribute the form to a representative (random) sample of the students, and then tabulate the marks, calculate percentages to determine a percentage cut-off point above which you will consider revising the material presented.

5. You should now be able to work with a team of one or two other faculty members and produce a learning package; as you do it, your understanding of the process will increase.

ITEM A

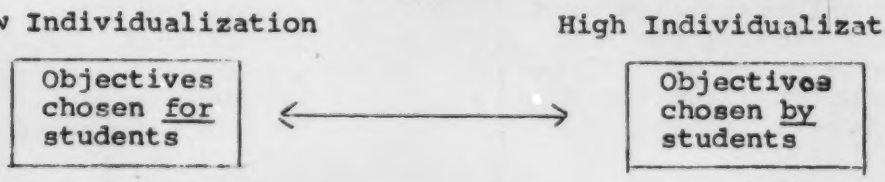
# INDIVIDUALIZATION OF LEARNING

By Howard Russell

Individualized learning is student-centered in that it is designed in response to individual student learning needs and constantly modified by these needs. Individualized learning is not an all-or-nothing concept. Even a little allowance for the individual student is better than none. The degree to which a school can make use of individualized learning is determined by the institutional constraints, whatever they may be. This paper examines individualized learning by considering its four major elements and the degrees to which each of these elements can be applied in the light of whatever local constraints might limit them.

## I Performance Objectives

Performance objectives representing the individual student outcomes for a course are basic to individualized instruction. If the constraints rule out the possibility of performance objectives, individualized instruction will not be possible. The degree of individualization is dependent upon the locus of decision making about the objectives. The continuum looks like this:




In all cases the objectives are made known to the students.

The number of options between the two extremes is such that almost any set of constraints can be worked around in order to produce viable performance objectives for individualizedlearning.

## II Evaluation

If performance objectives are considered basic to individualized instruction, then criterion referenced evaluation must be considered the key to individualized instruction. In using criterion referenced evaluation, a student's progress is determined by his achievement of specific performance objectives, which means that the student is measured against his own progress and not compared to a group. If constraints prohibit criterion referenced evaluation of the student both while he is in the process of learning (formative evaluation), and when he has completed the course (summative evaluation), individualized instruction will not be possible. The degree of individualization is dependent upon the number and kinds of evaluation instruments applied and the degree to which the instructional program for an individual student can be modified to respond to his learning experience and pacing needs revealed by the evaluation. The evaluation continuum whithin the possibilities for individualization looks like this:

Lo

| Low Individualization | | High Individualization |
|---|---|---|
| Final evaluation used for final grade and as a means of deciding whether or not to recycle a student. | ⟷ | Evaluation data from<br>Entry Level Test<br>Pre-Test<br>Progress Quizzes<br>Attitude Measures<br>Final Evaluation<br>used to guide responses to individual student learning needs |

A final exam used for a final grade and as a basis for deciding whether or not a student should be recycled through all or part of the instructional sequence serves both as formative and summative evaluation. Some degree or combination of evaluation procedures between these two extremes would most likely be possible within the limits of most institutional constraints.

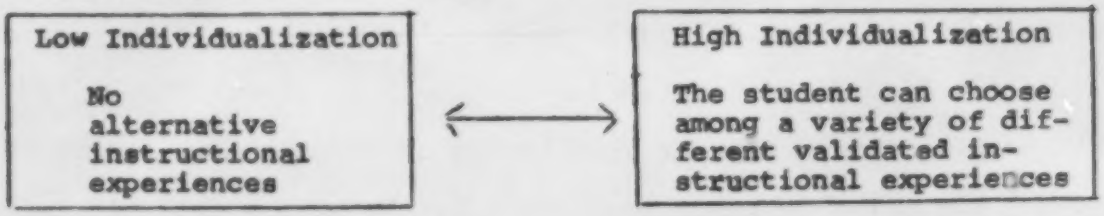
Ways in which the differences in student learning needs discovered through evaluation may be responded to are discussed in the next two sections.

III Alternative Learning Experience

In individualized instruction, differences in student learning style must be allowed for by providing alternative instructional methods and/or flexible pacing. If the constraints do not allow for at least one of these, individualized instruction must be ruled out. The next section deals with pacing. Here we consider instructional methods.

Multiple instructional methods clearly calling into play different learning styles to reach the same objectives are an important but not essential element of individualized instruction. What this means is that a variety of films, filmstrips, videotapes, audio tapes, slide tapes, paper programs, books, records, simulations and tutoring are available. Of course, indivdualized learning also includes all forms of group learning experiences (e.g. lectures, seminars, and discussion groups) especially if such an experience is what a particular student needs at a particular time. The indivudualizing is not in having a student receive all instructions alone, but in having the student given instructional experiences that match his learning needs.

It can be diagrammed like this:


Low Individualization
No alternative instructional experiences
High Individualization
The student can choose among a variety of different validated instructional experiences

Even if constraints result in no provision for alternative instructional experiences, individualization can be accomplished by allowing students to go through the instructional experience at a pace that meets with their individual instructional needs.

IV Alternative Student Pacing

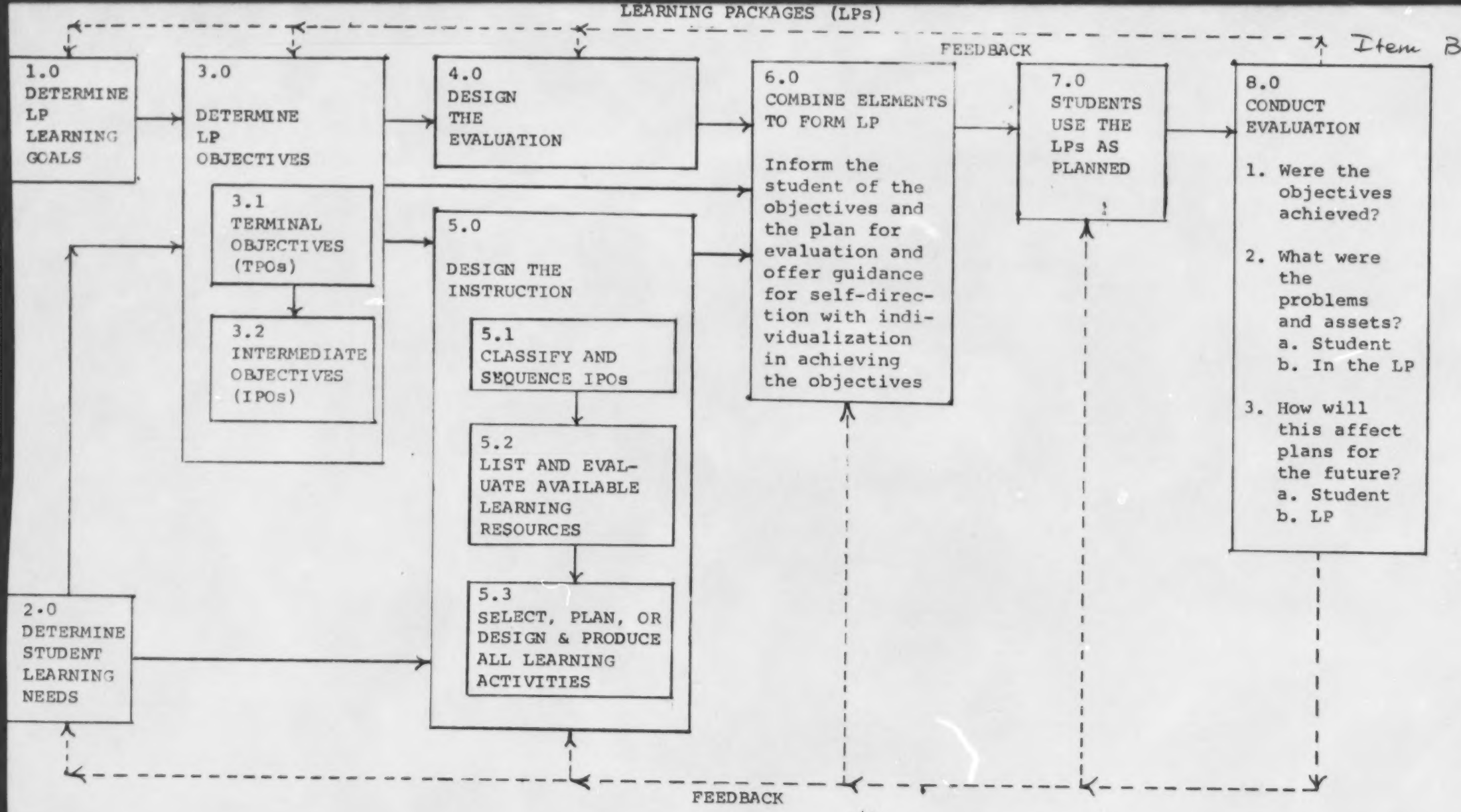
In many instructional settings time is probably the most easily manipulated variable in the design of student-centered individualized learning. By providing for alternative student pacing one student is not held back waiting for others to catch up, nor is another rushed ahead regardless of interest, understanding or motivation. Most schools have the constraints of schedules planned for groups of students, but indivudualized instruction can easily operate within these fixed limits. The schedules even have the advantage of providing deadlines for students, many of whom, if given total freedome to move at their own pace, would not move at all. Through the use of pre-tests and allowing post-testing when a student believes he is ready, "fast" students can be allowed an "early out" or given additional material. Students working hard but needing more time can be given an "I" grade at the end of a term. The "I" would be changed to the appropriate credit grade when the work is completed.

A "slow" student could also take a "W" grade which would let him out of the course at any time without failing and allow him to re-enroll later for the course without having to repeat instruction for objectives in which his competency had already been demonstrated. The student pacing continuum can be diagrammed like this:

Low Individualization
High Individualization
No alternative student pacing
The student can choose his own pace for achieving the objectives

Even if constraints allow no provision for alternative student pacing, individualization can beaccomplished by providing the student with alternative instructional experiences to choose from. In most instances, a higher degree of flexibility in meeting student needs can be achieved by a combination of alternative instructional experiences and alternative student pacing.

There are degrees in individualizing learning. The extent to which a learning program can meet the needs of a particular student is the extent to which it is individualized. Though constraints may limit each of the four elements of individualized learning, they seldom rule it out entirely, and usually they can be balanced out in a way that will produce a beneficial degree of individualization.


LEARNING PACKAGES (LPs)
Item B
FEEDBACK
1.0 DETERMINE LP LEARNING GOALS
3.0 DETERMINE LP OBJECTIVES
3.1 TERMINAL OBJECTIVES (TPOs)
3.2 INTERMEDIATE OBJECTIVES (IPOs)
4.0 DESIGN THE EVALUATION
5.0 DESIGN THE INSTRUCTION
5.1 CLASSIFY AND SEQUENCE IPOs
5.2 LIST AND EVALUATE AVAILABLE LEARNING RESOURCES
5.3 SELECT, PLAN, OR DESIGN & PRODUCE ALL LEARNING ACTIVITIES
2.0 DETERMINE STUDENT LEARNING NEEDS
6.0 COMBINE ELEMENTS TO FORM LP
Inform the student of the objectives and the plan for evaluation and offer guidance for self-direction with individualization in achieving the objectives
7.0 STUDENTS USE THE LPs AS PLANNED
8.0 CONDUCT EVALUATION
1. Were the objectives achieved?
2. What were the problems and assets?
a. Student
b. In the LP
3. How will this affect plans for the future?
a. Student
b. LP
FEEDBACK





H.H. Russell

# MODEL FOR THE DESIGN, IMPLEMENTATION AND EVALUATION OF LEARNING PACKAGES

## 1.0 DETERMINE LEARNING PACKAGE LEARNING GOALS

The learning goal is a brief statement that gives a general description of the competency that the student will be expected to have once the learning package is completed. The learning goal gives the student an overall perspective to use in sorting out pertinent knowledge, skills and attitudes that should be retained from the package and supplies the integration that a list of specific behavioral objectives sometimes lacks. The direction provided by a learning goal can enhance student motivation and perseverance.

Begin writing a learning goal by deciding on the general subject matter, concept, attitude or skill to be taught. Once you have isolated a general area, use words that you are comfortable with to describe what you would like to have the student achieve. Make sure what you have described is an <u>outcome</u> and not the <u>process</u> the student will follow to arrive at the outcome.

Finally, re-write your goal in words that will communicate its meaning to a student.

## 2.0 DETERMINE STUDENT LEARNING NEEDS

Awareness of and response to student learning needs is one of the keys to designing a useful learning package. The following are among the things you should consider when assessing student learning needs:

1. What do the students already know that is related to what will be taught them in the learning package?
2. What learning aptitudes or problems are present in this group of students?
3. How much time do students actually have for this learning package?
4. What particular knowledge, attitudes, and skills do the students want to learn in relation to the learning goal?
5. What is the level of student motivation toward learning what the package has to teach?

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There are a number of ways of finding out about student learning needs. Some of them are:

1. Informally or formally asking the students.

2. Reading the objectives of previous learning packages in the course sequence.

3. Analyzing student records.

4. An entry level test to measure whether or not students have the prerequisite knowledge, skills, and attitudes.

5. Feedback from evaluations of the previous use of the learning package you are working on.

During this step in the development of a learning package, you collect the data that will help you take the point of view of a student advocate who can make the objectives and learning activities as relevant as possible to student learning needs.

## 3.0 DETERMINE LEARNING PACKAGE OBJECTIVES

This is a two-part process in which the terminal performance objectives (TPOs) of the learning package are written and then the TPOs are analyzed to break them down into intermediate performance objectives (IPOs) which describe the achievements necessary along the way to arriving at the TPOs.

Objectives are meant to inform students of what is finally expected of them. Great care should be taken in defining objectives in order to have them communicate as unambiguously as possible what is expected of the student at the completion of a learning activity. The objectives will provide students with specific goals that can be used to organize learning activities, permit more efficient study, and reduce time wasted on irrelevancies, as well as provide a bench mark against which they can measure their own progress.

For the instructor the process of defining objectives provides the vehicle for thinking through what will be taught and its impact on the student. Objectives provide the means of sequencing instruction, the basis for the selection of learning activities, and the only description of the elements of student performance that will be evaluated during and after instruction.

## 3.1 Terminal Performance Objectives (TPOs)

The TPOs are the behavioral objectives for the learning package. In the completed package you will list them beneath the learning goal as a way of describing unambiguously some specific things the student will be able to do to show achievement of the learning goal. The TPOs are the basis of the summative evaluation which tests to see if the student has achieved the intended goal.

The way to develop the TPOs is to write a list of the performances that would cause you to agree that the learning goal had been achieved. It is important to write these TPOs in the light of what you know about your students' learning needs in order that the TPOs express how students with needs would most appropriately show their achievement of the learning goal. This should be seen as a process in which you try to express the TPOs both in terms of what you know about the student learning needs and the learning goals you have said are important.

Theory has no usefulness to the student except in relation to the application of it. The TPOs should, therefore, reflect both theory and practice.

## 3.2 Intermediate Performance Objectives (IPOs)

The IPOs provide a way of looking at the completion of steps along the way to the achievement of a TPO. For the student IPOs represent what has to be gotten out of each individual learning activity. The IPOs are the basis of formative evaluation which gives the student feedback on progress toward a TPO. In designing the learning package the IPOs give the reason for the selection of learning activities to be included.

To list IPOs analyze each TPO to discover the learning steps necessary for your students to achieve it. These may consist of component actions, knowledge, and skills that the student must master to attain the TPO.

In presenting IPOs in the learning package it is often helpful to state them as expected outcomes of learning activities - something that says in effect:

> Read the article, view the film, or whatever, in order to be able to answer the following questions. Complete the following diagram or demonstrate the following skill in the lab or in seminar.

## 4.0 DESIGN THE EVALUATION

It is advisable to plan and develop all of the evaluation procedures and materials early in the design of a learning package. These might include a pre-test covering the TPOs of the learning package. A pre-test can be used either as a way of letting the students know what the learning package is all about (a possible alternative to stating objectives) or as a way of exempting a student from part or all of a learning package, if previous achievement of objectives can be demonstrated. Another evaluation instrument is an entry-level test used to determine whether or not the student has the prerequisites for the learning package. Self-assessment tests can be used by students to measure their own progress toward an objective to help them decide whether or not to seek additional learning activities. Finally, there is the post-test which covers the terminal objectives of the learning package as the measure of student achievement of the competence represented by the learning goal.

Evaluation should measure student achievement of the objectives. Test items are to be constructed to make them as close as possible to the behaviors described in the objectives they are intended to measure. Items should reflect the content as well as the domain and level of the objective.

## 5.0 DESIGN THE INSTRUCTION

The process of designing the instructional part of a learning package is guided by the learning package objectives and the student learning needs. This process may be broken into three steps.

### 5.1 Classify and Sequence IPOs

The purpose here is to put the IPOs into the most efficient succession for student learning. This will then become the order of the learning activities in the learning package.

To sequence the IPOs, also what has to be learned first, before something else can be understood or learned, classifying the IPOs according to the levels of the cognitive, affective, and psychomotor domains of educational objectives is a good way to begin the process of sequencing. Since classification represents a hierarchy, the lower level IPOs would be placed first in a learning sequence.

The order of performance in a skill, or time relationships, or some other system may support another helpful way of sequencing instruction.

### 5.2 List and Evaluate Available Learning Resources

Begin this step by finding out all of the available written and audio visual resources that cover the content you want. Check these for the validity of the content, and then find resources which will help students achieve each of the objectives of thepackage. You will have to design your own learning activities to help students achieve the objectives for which there are ready-made activities.

### 5.3 Select, Plan, or Design and Produce All Learning Activities

Consider several media alternatives for each objective in order that students can match the materials with their own learning aptitudes. Be sure there is a way for the student to meet each IPO. Try to choose from what is available. If necessary, modify what is available to bring out IPOs. If there are no learning materials available, design and produce your own learning activities to bring out the IPOs.

## 6.0 COMBINE ELEMENTS TO FORM LEARNING PACKAGE

This refers to the handout that is given the student. In this handout the student should be informed of the objectives and the plan for evaluation, and then offered guidance for self-direction with individualization in achieving the objectives. The learning package format we have developed has the following headings:

Learning Goal

Objectives

How You Should Proceed
This is the section that presents the various learning activities and relates them to the IPOs that they are intended to help the student achieve.

How You Will be Evaluated
This is an explanation of the plan for the evaluation.

## 7.0 STUDENTS USE THE LEARNING PACKAGE AS PLANNED

## 8.0 CONDUCT EVALUATION

This evaluation refers to the evaluation of the student and to evaluation of the learning package. Some of the questions that will need answering are:

1. Did the student achieve the objectives?
2. What were the problems and assets -
   a. with the student
   b. with the learning package
3. How will what has been discovered in the evaluation affect the future -
   a. of the student
   b. of the learning package

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TABLE I

ITEM D

General Objectives and Related Specified Outcomes

| | General Objective Statement | Key Action Terms |
|---|---|---|
| COGNITIVE DOMAIN<br>a. Knowledge level | Knows: terminology, facts, theories, principles, laws, methods, techniques, procedures, rules, formulas, concepts, classes, etc. | name define<br>match state<br>identify reproduce<br>select list |
| b. Understanding level | Understands or grasps the meaning of: principles, theories, laws, formulas, concepts, graphic representations, constructs, etc. solves an equation. | explain discuss<br>differentiate<br>interpret restate<br>compare infer<br>predict summarize<br>solves illustrate |
| c. Application level | Selects and applies principles, techniques, formulas, rules, etc., in new situations; solves single-answer problems. | demonstrate<br>employ compute<br>solve predict<br>prepare show |
| d. Decision-making level | Uses a decision-making process to generate and identify best solution to open-ended (multiple answer) problems.<br>Organizes elements into a meaningful whole and/or original construct; analyzes material as to its constituent parts, their interrelationships and organizational pattern; evaluates material by specific criteria. | outline construct<br>write diagram<br>discriminate<br>distinguish<br>conclude compare<br>formulate<br>propose design<br>judge revise<br>assemble organize<br>criticize<br>critique classify<br>analyze evaluate<br>justify |
| PSYCHOMOTOR DOMAIN | Performs or demonstrates a skill. | perform operate<br>assemble adjust<br>construct<br>repair dismantle<br>maintain |
| AFFECTIVE DOMAIN | Shows interest in . . .<br>Values or appreciates . . . | ask choose<br>volunteer<br>comply assist<br>participate<br>practice initiate<br>discriminate<br>observe |

## DEFINITION

Norm-referenced tests are used to determine an indivdual's performance in relationship to the performance of other indivduals on the same measuring device.

## MEANINGFULNESS

What the individual can do as compared to others, not how much he knows.

## USE

Used primarily to make decision about individuals that can be bestmade by knowing about the competition. These are occasions where a degree of selectivity is required. Norm-referenced tests are designed to "spread people out" in order to say who is best and who is down the line. Norm-referenced tests are not as suitable for evaluating instructional programs as are criterion-referenced measures.

## VARIABILITY

Since the meaningfulness of a norm-referenced score is basically dependent on the relative position of the score in comparison to other scores, the more variability in the scores the better.

## ITEM CONSTRUCTION

Items are constructed to promote varient scores.

1. Nothing too easy or too hard.
2. Wrong options are made as attractive as possible.

## ITEM ANALYSIS

Items that are not properly discriminating between the individuals with high and low scores on the test are thrown out. These are usually those which are too easy, too hard, and/or ambiguous.

## REPORTING AND INTERPRETATION

Group-relative descriptors such as percentile ranking or standard scores are used since these allow us to tell from a single score how well the individual performed in relationship to the group.

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## CRITERION-REFERENCED TESTS

### DEFINITION

Criterion-referenced tests are used to determine an individual's status with respect to some criterion, i.e., performance standard.

### MEANINGFULNESS

What the individual can do as compared to a performance criteria, not his standing in relation to others.

### USE

Can be used to make decisions about individuals and about instructional programs.

1. Individual Considerations
   Has the learner mastered the criterion performances considered prerequisite to commencing the next steps in learning or receiving certification?

2. Instructional Program Considerations
   Has the instructional sequence helped the learner reach the criteria?

These are occasions where there are no constraints on all of the individuals having closely similar scores. Criterion-referenced tests are not designed to "spread people out."

### VARIABILITY

Since the meaningfulness of a criterion-referenced score comes directly from the connection between the items and the criterion and is not dependent on comparison with other scores, variability is irrelevant.

### ITEM CONSTRUCTION

Items are constructed to make them as close as possible to the behaviors described by the criterion.

1. Items must reflect the content of the criteria.

2. Items must reflect the taxinomic level of the criteria.

## ITEM ANALYSIS

1. Non-discriminating items need not be eliminated, especially if they reflect important attributes of the criterion. Only non-discriminating items which do not discriminate between those who have and have not had instruction need be questioned.

2. Positively discriminating items are respectable and would not be eliminated. It should be considered that they may be pointing to areas of instruction where the program is not succeeding well enough.

3. Negatively discriminating items (answered correctly more often by the low scorers than by the high scorers on the total test) must be analyzed for flaws in the item.

## REPORTING AND INTERPRETATION

Scores which are essentially "on - off" in nature are used since these are all that is necessary to tell us whether the individual has either mastered the criterion or he has not. Frequently there is a range of acceptable performance.

1. If scores will determine the future instruction of individuals, levels of less-than-criterion performance can be set up to guide in assigning persons to alternative courses of action available.

2. In using criterion-referenced measures for the purposes of evaluating instructional programs, it is best to employ a number of schemes such as:
   a. Reporting the number of individuals who achieve the criterion.

   b. Traditional descriptive statistics - means and standard deviations.

   c. Average "percentage - correct."

   d. Per cent of group reaching criterion level.

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MULTIPLE CHOICE, CRITERION-REFERENCED
TEST ITEMS

WEAKNESSES

1. Require more time to answer than true-false items, but true-false are not useful on higher-order mental processes and do not have as high a discriminatory power.

2. Cannot be used to evaluate ability to organize materials or express answers according to acceptable language usage rules. Essay-type tests are best for this.

3. Item writing is difficult.

STRENGTHS

1. Most flexible and versatile of all selection-type items.

2. Works at all levels of the cognitive domain.

3. Can be scored rapidly by anyone with a key or by a computer.

4. Can be scored objectively.

CONSTRUCTION

General

1. In criterion-referenced test item construction the first step is to establish the criteria based on the instructional objectives.

   Since criterion-referenced tests are specifically designed to provide information that is directly interpretable in terms of given performance standards, these standards must be established prior to test construction. The purpose of testing then becomes the assessment of each individual's status with respect to these standards.

2. The task of the item writer is to produce items that <u>accurately</u> sample the range of criterion behavior which they are designed to measure.

   In a typical instructional situation, this means that the test items should possess congruity with the class of eligible behaviors circumscribed by the instructional objectives.

The Item as a Whole

1. There should be one central theme or frame of reference in the item, and all alternatives should be within it.

2. Items should be concise, unambiguous, gramatically correct, and alternatives must linguistically fit the stem.

   a. Vocabulary should be on the same level as instruction.

   b. Simple and direct writing style should be used.

   c. Proper language is essential to avoid providing clues through tense conflicts, misuse of articles, and singular-plural discrepancies between verbs and nouns.

The Stem

1. The stem should present the problem and set the frame of reference for responding.

   In the stem all of the conditions and limitations of the problem should be presented in such a way that the informed student could formulate some broad answer to the central question before looking at the alternatives.

   When qualifying material is required, as is often the case when measuring higher-order objectives, it is wise to incorporate this material in an introductory statement preceeding the stem. Several items could use the same introductory statement.

2. The stem may be a question, a complete statement, or an incomplete statement.

3. All the words which would otherwise need to appear in each alternative should be incorporated into the stem.

4. The wording of the stem should clearly indicate whether the student is to select the "correct" or the "best" answer.

5. Avoid negative statements when possible. If negatives must be used, underline them to avoid errors due to misreading. When negative stems are necessary, never use negative statements in the alternatives; or you might create trick questions containing double negatives.

The alternatives

1. All of the alternatives must be similar in that they are:
   a. Within the frame of reference of the item.

   b. Gramatically consistent and appropriate to the stem.

   c. About the same length, complexity, and specificity.

2. "All of these" and "none of these" should not be used with "best answer" questions.

3. Having more than one correct alternative can cause test related errors which can be avoided by covering the same alternatives in a series of true-false items.

4. For clarity and ease of reading, alternatives should be arranged in some logical order if possible.

The Distractors

1. The distractors should present plausible choices.

2. The distractors can represent common misconceptions or errors.

3. The distractors should not introduce ambiguity.

4. The distractors in criterion-referenced tests should not be partly true and partly false in order to give a clear indication of the misconceptions of the students who chose them.

5. Research indicates that it is better to construct an item with only one good distractor than it is to construct an item with more than one distractor if the additional ones are poor..

The Correct Answer

1. The correct answer must be a better response to the question than any other alternative, in that it most clearly reflects the criterion behavior the item is designed to evaluate.

2. The correct answer must not contain irrelevant cues which might betray it, such as a synonym or word association with any term in the stem.

3. The correct answer should be in each alternative position about the same number of times on the test, but do not do it according to a pattern.

ITEM F

DEPARTMENT OF TEST CONSTRUCTION
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NEW YORK, NEW YORK 10019

## Sample Questions Which Could be Used by Faculty to Evaluate Test Questions

1. Does the objective for the test question reflect one or more objectives established for the course?

2. Is the content of the test question representative or congruent with that of the course for which the question was developed?

3. Does the test question deal with one or more important aspects of the content that it represents?

4. Is the format of the test question the best one for the particular objective, cognitive level, or content relative to the question?

5. Is the test question written in conformity with the format that it represents?

6. Is the format and content of the test question appropriate for the student for whom the question was developed?

7. Is the test question a valid measure of what it is intended to measure?

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LP 314 - Dependency ITEM I

Your evaluation will be used to improve this learning package. A frank expression of opinion by students provides an important guide for faculty decisions in revising learning packages.

Directions: Quickly rate each component of this package that is listed in the chart below. Place an "X" in the column that most fits your opinion. Comment only if you wish to clarify.

| LP component to be evaluated | OK | CONSIDER REVISING | | | | Comment, if you wish to clarify |
|---|---|---|---|---|---|---|
| | Appropriate | Too simple | Too difficult | Unnecessarily repetitive | Not clearly related to LP objectives | |
| The READING AND RESOURCE LIST FOR "DEPENDENCY" at the end of the package | | | | | | |
| Your experience reading from the above list to broaden your knowledge about DEPENDENCY. | | | | | | |
| CR 34, "Admission to the Hospital" | | | | | | |
| Tray 57, "Nurse-Patient Interaction, The Hospitalized Person" | | | | | | |
| Film: "Dependency: A New Definition" | | | | | | |
| Group discussion following film | | | | | | |
| Class 1/14, Friday | | | | | | |
| Class 1/17, Monday | | | | | | |

| LP Component to be evaluated | OK | CONSIDER REVISING | | | | Comment, if you wish to clarify |
|---|---|---|---|---|---|---|
| | Appropriate | Too simple | Too difficult | Unnecessarily repetitive | Not clearly related to LP objectives | |
| The seminar "The Relationships between .. .." | | | | | | |
| Readings listed to prepare for class: "Developing a Nrsg Care Plan" | | | | | | |
| The Class "Developing a Nursing Care Plan" | | | | | | |

1. All things considered this LP was
   ____ excellent ____ good ____ fair ____ poor

2. How would you rate the LP in helping you reach the learning goals and objectives at the beginning of the package?
   ____ excellent ____ good ____ fair ____ poor

3. The instructions about how you should proceed were
   ____ very clear ____ clear ____ slightly confusing ____ very confusing

4. Rate the relevance of this LP to nursing practice.
   ____ very relevant ____ relevant ____ generally irrelevant ____ a waste

5. Please write at least one specific comment here. Please indicate any questions raised by the LP. Thank you.



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## APPENDIX D

## TITLES OF PROGRAMS PRODUCED LOCALLY

| Program Title or Number | Media | Comments |
|---|---|---|
| Orientation to C.M.C.E. | Videotape | |
| Simulated Disaster | Videotape | Unedited |
| What is CCTV | Videotape | |
| Nurse/Patient Relationships | Slides | |
| Media and Methods | Slide/tape | |
| Seminar Interaction | Videotape | |
| Community Health | Slide/tape | Recording |
| Orientation to IMC | Slide/tape | Revise |
| CPR | Video | Re-edited |

### TITLES OF COMPUTER PROGRAMS ADAPTED TO ST. ANSELM'S COLLEGE COMPUTER CAPABILITIES

| Program Title | Team or Personal Description | Comments |
|---|---|---|
| IMC Terms | TNB - Review of IMC Terms | Production |
| Student | TNB - List IMC Terms Users | Production |
| Inuse | General - Prohibits Others from Using Terminal | Production |
| Pain | Junior - Simulation | Adapted |
| Pain Base | Junior - DTSS Version of Pain Simulation | Adapted |
| Nerverev | Senior - Review of Nervous System | Adapted |
| Heart Rev. | Senior-Junior - Review of Heart | Adapted |
| .Sign on. | Nursing-controls a Student Computer Interaction | Adapted |
| Sign on | Nursing - program Selector | Adapted |
| Marshall | Jr/Sr-Simulation of Nerve Disorder | Adapted |
| Farley | Jr - Performs T Test on Data | Production |
| Style | Sr - Analysis of Leadership Styles | Adapted |
| Fluid | Sr - Review of Fluids | Adapted |

## APPENDIX E

### A SURVEY OF STUDENT ATTITUDES REGARDING THE REVISION OF THE CONTENT OF TNB LEARNING PACKAGES

To provide data for the TNB Teaching Team to use in revising the content of the learning packages (LPs) in their syllabus, all sophomore nursing students were required to fill out a "TNB Learning Package Content Evaluation" form after completing each of the 10 packages. Using these forms, students could indicate their opinions about the need for revision of each learning activity in a package. This provided a quantitative measure of student attitude toward every learning activity in the shophomore pre-nursing course.

Students could fill out the forms quickly by marking that an activity was "appropriate" or that the faculty should consider revising it because it was either "too simple", "too difficult", "unnecessarily repetitive", or "not clearly related to the objectives". There was additional space for comments, if a student wished to clarify a response.

In order to report the findings, ratings for each item were tallied and percentages of students evaluating a learning activity in one of the "consider revising" categories were calculated. (The 10 forms with their tallies and percentages are in the appendix.) Items for which more than 15% of the students suggested that the faculty consider revision will be discussed in the report.

The most obvious thing to note from the findings as a whole is the positive student attitude toward most of the learning activities in the TNB learning packages.

Of the 134 elements of the LPs that were evaluated only 20 received a rating in which 15% or more students suggested revision. The 15% level was chosen merely because it was low enough to separate out a reasonable number of items for close attention. In all other respects it was an arbitrary cut-off point.

## CONSIDERATIONS FOR REVISION

The headings in this section refer to the items in the "TNB Learning Package Content Evaluation" which in turn refer to activities in the LPs in the sophomore syllabus. The best understanding of the comments will come by referring to the syllabus while reading them.

LP 201

- Film: "No Man is an Island"

  Thirty-two percent (32%) of the students evaluated this film in one of the "consider revising" categories. Over half of these marked that it was too simple. Several written comments can be summarized by quoting the student who said, "The film tells you what you already know." Other students indicated that they did not see how the film related to the objectives of the learning package.

  On the other hand, several students wrote comments that the film was excellent. One student said that it helped her to understand the Nursing Department philosophy more than just reading it.

- Text: Kelly, pp. 38-39 and p. 167

Twenty-two percent (22%) of the students suggested we consider revising the reading. Sixteen percent (16%) were for revising the learning task. Most of these students felt that these learning activities were not related to the objectives of the package.

As will be seen with some of the later LPs, the historical activities in the packages often receive this kind of rating. It is advisable that the historical content of the packages be clearly expressed in the objectives.

The rationale for a particular historically related learning activity within a package could be stated in a sentence or two as an introduction to the activity.

LP 202

- Learning task: Learn the meaning of the following words: instructional technology; learning package; hardware; software; media; direct experience; vicarious experience.

Sixteen percent (16%) suggested we consider revising this because it is difficult and not clearly related to the objectives of the LP. This is just above the cut-off point. If there was a sentence of rationale, the rating would probably improve.

Several students wrote in positive comments on the value of the practice in the IMC.

LP 203

The evaluations of this learning package indicate no needs for revision. One RN student did suggest that this package be optional for RN students.

TNB LEARNING PACKAGE CONTENT EVALUATION

Excerpts from:
LP 201 - The Core Curriculum and Seminar Method of Teaching/Learning

Student's Name_____ (Number of students responding - 92)

Your evaluation will be used to improve this learning package. Please sign it. Your response will be confidential. When you have completed it, put it in the box in the IMC. A record will be kept to insure that all students turn in their evaluations.

Directions: Quickly rate each component of this package that is listed in the chart below. Place an "X" in the column that most fits your opinion. Comment only if you wish to clarify.

| LP component to be evaluated | OK | CONSIDER REVISING | | | | Comment, if you wish to clarify |
|---|---|---|---|---|---|---|
| | appropriate | too simple | too difficult | unnecessarily repetitive | not clearly related to LP objectives | (Percent suggesting revision) |
| A Cognitive Map of the . . . | 81 | | 4 | 4 | 3 | 12% |
| Final Progress Report of the . . | 84 | 1 | 2 | 4 | 1 | 9% |
| Learning tasks for the 2 above | 83 | 2 | | 5 | 2 | 10% |
| Philosophy of the Department of . . . | 85 | | | 6 | 1 | 8% |
| Film: "No Man is an Island" | 63 | 16 | | 6 | 7 | 32% |
| Learning task for the 2 above | 79 | 4 | | 5 | 4 | 14% |
| Readings from Kelly | 72 | 5 | 1 | 2 | 12 | 22% |
| Learning task for the above | 77 | 4 | | 1 | 10 | 16% |

LP 201

| LP components to be evaluated | OK | CONSIDER REVISING | | | | Comment, if you wish to clarify (Percent suggesting revision) |
|---|---|---|---|---|---|---|
| | APPROPRIATE | too simple | too difficult | unnecessarily repetitive | not clearly related to LP objective | |
| Phillips pp. 140-143 | 79 | 3 | | 10 | | 14% |
| Learning task for the above | 79 | 3 | | 10 | | 14% |
| Preparation for the debate | 86 | 2 | | 3 | | 7% |
| Column Total | | 46 | 8 | 117 | 41 | |

PLACE THE COMPLETED QUESTIONNAIRE IN THE BOX AT THE IMC RECORD CENTER

82

LP 202 - Orientation to IMC - LP Content Evaluation

Student's name_____ (Number of students responging, 86)

Your evaluation will be used to improve this learning package. Please sign it. Your response will be confidential. When you have completed it, put it in the box in the IMC. A record will bekept to insure that all students turn in their evaluations.

Directions: Quickly rate each component of this package that is listed in the chart below. Place an "X" in the column that most fits your opinion. Comment only if you wish to clarify.

| LP components to be evaluated | OK | CONSIDER REVISING | | | | Comment, if you wish to clarify |
|---|---|---|---|---|---|---|
| | appropriate | too simple | too difficult | unnecessarily repetitive | not clearly related to LP objectives | (Percent suggesting revision) |
| 12 IMC, Philosophy, Policy, . . . | 89 | | | | 1 | 1% |
| 58 IMC, Helpful Words . . . | 79 | 3 | 6 | 1 | 1 | 12% |
| Tour of IMC | 88 | 1 | | 1 | | 2% |
| Demonstration and Practice with media | 86 | 1 | | 3 | | 4% |
| Learning words from 58 IMC | 76 | 2 | 7 | 1 | 4 | 16% |
| Self-administered post-test | 87 | | | 2 | 1 | 3% |
| Column Total This questionnaire | | 7 | 13 | 8 | 7 | |



PLACE THE COMPLETED QUESTIONNAIRE IN THE BOX AT THE IMC RECORD CENTER

## TNB LEARNING PACKAGE CONTENT EVALUATION

LP 203 - Introduction to the Availability, Location, and Use of the Library's Resources in Nursing - Print, Non-print and Human

Student's Name _____ (Number of students responding, 90

Your evaluation will be used to improve this learning package. Please sign it. Your response will be confidential. When you have completed it, put it in the box in the IMC. A record will be kept to insure that all students turn in their evaluations.

Directions: Quickly rate each component of this package that is listed in the chart below. Place on "X" in the column that most fits your opinion. Comment only if you wish to clarify.

| LP components to be evaluaged | OK | CONSIDER REVISING | | | | Comment, if you wish to clarify (Percent suggesting revision) |
|---|---|---|---|---|---|---|
| | appropriate | too simple | too difficult | unnecessarily repetitive | not clearly related to LP objectives | |
| Instruction period in library | 82 | 2 | | 3 | 3 | 9% |
| Hands-on work session in library | 80 | 2 | 3 | 4 | 1 | 11% |
| Column Total | | 4 | 3 | 7 | 4 | |

PLACE THE COMPLETED QUESTIONNAIRE IN THE BOX AT THE IMC RECORD CENTER

# APPENDIX F

## GUIDELINES FOR COORDINATING ACTIVITY IN IMC AND AV DEPARTMENT

I. Include "IMC Policy and Procedures" (12 IMC) in syllabi for TNB, N-I and N-II.

II. Procedure for requesting assistance:

A. Complete a requestion from - Use Reservation form for:
1. AV hardware requirement for class or seminar
2. Planning production of software
3. Instructional materials for labs

B. Retain white slip and return remaining slips (green, yellow, pink, goldenrod) to IMC Coordinator to to IMC Secretary.

III. Commitments and continuing activity support of AV Department:

A. Maintenance:
1. Coordination of purchasing
2. Emergency services, troubleshooting (Continue use of "Troubleshooting Slips", 72 IMC, in IMC)
3. Repairs of hardware, software, other instructional materials

B. Production:
1. Consultation for media selection, modality, content, media implementation of concepts, stiumulus variables

2. Media production such as video tape programs, photography, processing, format conversion, audio-tapes, slide/sound sets, transparencies, and the like.

C. Technical Assistance:
1. C.C.T.V. preparation and operation:
a. Give 48-hr. notice for classroom activity.
b. Over weekend, give 72-hr. notice.
c. For workshop activity, give one week notice.

2. Preparation, operation, and subsequent care of AV equipment needed by general college faculty members holding classes in the Gadbois Nursing Education Center.

3. Preparation, operation, and subsequent care of AV equipment for all workshops on campus sponsored by the Department of Nursing.

D. Instruction:

1. Assist with orientation of students and faculty to IMC.

2. Assist with student practicum exams.

3. Participate in training of IMC student assistants.

4. Assist with faculty practicum on operation of hardware and adjustment of CCTV equipment in seminar rooms.

5. Present workshops for faculty on production or projection as requested.

RF:yf
4/77